

169.2257

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
ZHENYA YOURLO) Examiner: N.Y.A.
Application No.: Not Yet Assigned) Group Art Unit: N.Y.A.
Filed: Herewith)
For: EFFICIENT VIDEO CODING) December 17, 2001

Commissioner for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

Preliminary to examination, please amend the above-identified application
as follows:

IN THE SPECIFICATION

Please substitute the text starting at page 4, line 18 and ending at page 5,
line 5 with the following replacement paragraph. A marked-up copy of this text, showing
the changes made thereto, is attached.

--Fig. 1A is a schematic representation of a prior art user customisable interface
system;

Figs. 1B to 1D show a number of examples of display output available from the
system of Fig. 1A;

Fig. 2 schematically illustrates an operational architecture with which the system of
Fig. 1A may be operated;

Fig. 3 illustrates the updating of MPEG information;

Fig. 4A to 4E depict how various images may be updated;
Fig. 5 shows MPEG block information;
Fig. 6 shows how no change may be efficiently encoded;
Figs. 7A to 7C show various conversions for different data structure;
Fig. 8 illustrates the predictive encoding of DC coefficients;
Fig. 9A shows the possible cases for neighbouring macroblocks;
Fig. 9B depicts Dirty and EncodeTouched flag marking;
Fig. 9C shows one method for caching and restoring macroblocks that are after a dirty block but before the start of a new slice;
Fig. 10 shows the marking of update dirty flags;
Fig. 11 shows a method of caching macroblocks;
Fig. 12 shows a macroblock updates using slices;
Fig. 13 is a schematic block diagram of a general purpose computer upon which the arrangements described can be practiced;
Fig. 14 is a flowchart showing a preferred method of P-frame encoding;
Fig. 15 is a flowchart showing a preferred method of I-frame encoding; and
Fig. 16 is a flowchart showing a method of encoding a sequence of images for transmission over a computer network.--

REMARKS

Claims 1-83 are pending. Claims 1, 6, 8, 11, 16, 43, and 70 are independent claims.

Applicants respectfully request favorable consideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,


Attorney for Applicants

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VERSION OF SPECIFICATION MARKED TO SHOW CHANGES

Please substitute the paragraph starting at page 4, line 18 and ending at page 5, line 5 with the following replacement paragraph.

--Fig. 1A is a schematic representation of a prior art user customisable interface system;

Figs. 1B to 1D show a number of examples of display output available from the system of Fig. 1A;

Fig. 2 schematically illustrates an operational architecture with which the system of Fig. 1A may be operated;

Fig. 3 illustrates the updating of MPEG information;

Figs. 4A to 4E depict how various images may be updated;

Fig. 5 shows MPEG block information;

Fig. 6 shows how no change may be efficiently encoded;

[Fig. 7 shows] Figs. 7A to 7C show various conversions for different data structure;

Fig. 8 illustrates the predictive encoding of DC coefficients;

Fig. 9A shows the possible cases for neighbouring macroblocks;

Fig. 9B depicts Dirty and EncodeTouched flag marking;

Fig. 9C shows one method for caching and restoring macroblocks that are after a dirty block but before the start of a new slice;

Fig. 10 shows the marking of update dirty flags;

Fig. 11 shows a method of caching macroblocks;

Fig. 12 shows a macroblock updates using slices;

Fig. 13 is a schematic block diagram of a general purpose computer upon which the arrangements described can be practiced;

Fig. 14 is a flowchart showing a preferred method of P-frame encoding;

Appl. No.: Not Yet Assigned
Atty. Docket No.: 169.2257

Fig. 15 is a flowchart showing a preferred method of I-frame encoding; and

Fig. 16 is a flowchart showing a method of encoding a sequence of images for
transmission over a computer network.--

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